

OPERATOR
WELL/LEASE
COUNTY

MEWBOURNE OIL COMPANY
True Gritt 8 B3BO Fed Com 1H
EDDY

046-0096

STATE OF NEW MEXICO
DEVIATION REPORT

30-015-42333

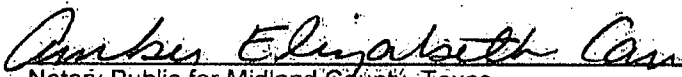
370	1.35
665	0.00
2,031	2.50
2,445	2.80
2,922	1.46
2,604	1.95
3,336	2.11
4,130	0.74
4,512	0.81
4,926	1.49
5,338	0.15
5,752	0.83
6,167	0.52
6,549	0.09

BY: 

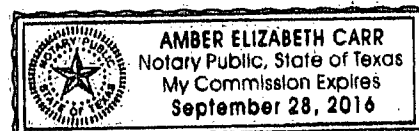
STATE OF TEXAS

COUNTY OF MIDLAND

The foregoing instrument was acknowledged before me on
Daisy Carrilló on behalf of Patterson-UTI Drilling Company LLC.


Notary Public for Midland County, Texas
My Commission Expires:

6/9/14 by



True Grit 8 B3BO Fed Com #1H
Eddy County, New Mexico
Quote 140485 & WT-140444
Design #2 - Tied to Gyro

DDC
The DIRECTIONAL DRILLING COMPANY



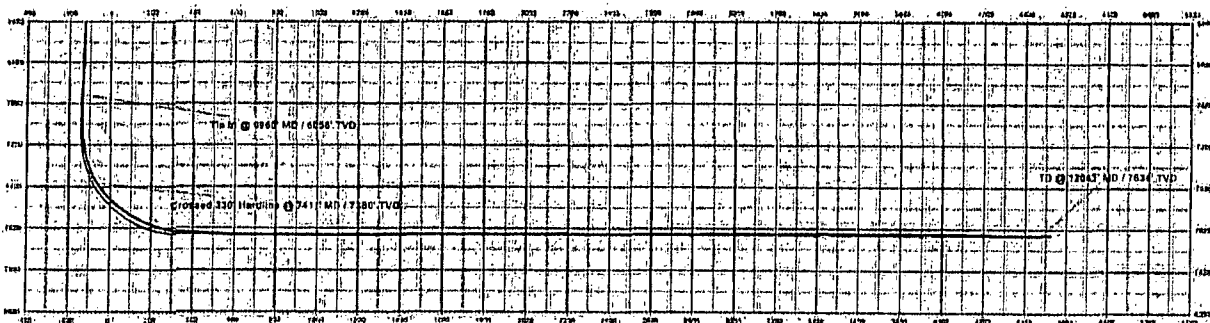
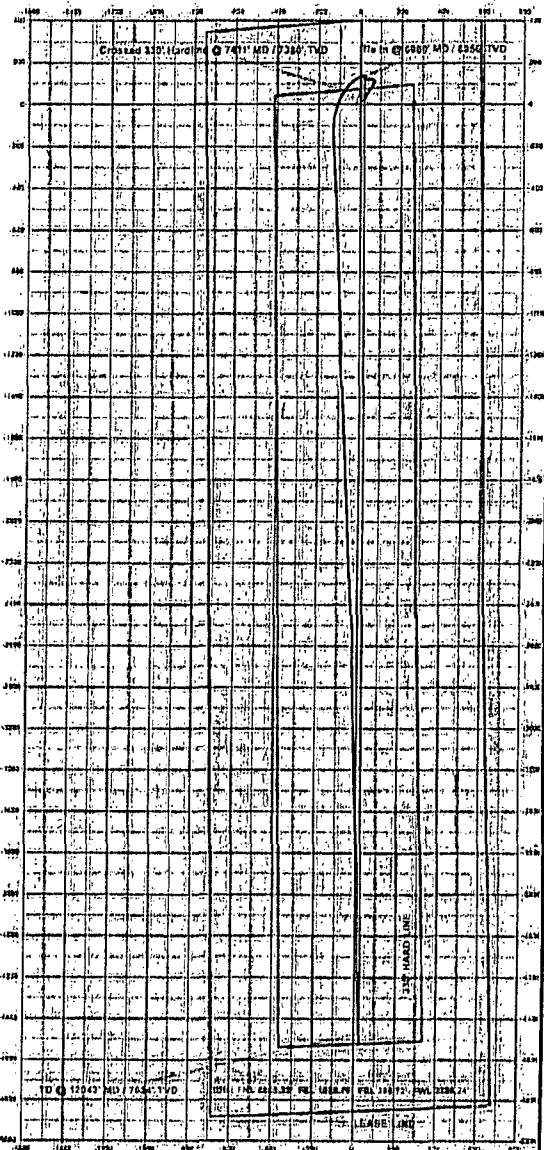
Magnetic Field
Strength: 48370.3nT
Dip Angle: 60.15°
Date: 2/7/2014
Model: IGRF2010

Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico East 3001
System Datum: Mean Sea Level

		Ground Level:		2894.0	
N-S	E-W	Northing	Easting	Latitude	Longitude
0.0	0.0	512712.70	474727.00	32° 24' 44.221 N	104° 26' 14.825 W

PLAN	EVD	4N/5	48/W	RAISING	RAISING	Latitude	Longitude
FBHL True Q1) # 0300 Fed Com #1H D#2 plan hlx target center	7629.0	-4536.1	26.2	50718.4	47473.19	32° 23' 59.43" N 104° 24' 54.47" W	

MD	Ine	Asl	TVD	+H/-S	+H/-W	Vsect	Departure	Annotation
81000	2,07	353,70	0995,5	136,8	21,3	-135,8	215,2	Tie in @ 5940' MD / 6990' TVD
7411,4	37,63	214,18	7370,7	08,3	-75,4	-40,7	34,8	Crossed 324' Hardline @ 7411' MD / 7360' TVD
12043,0	80,10	177,30	7834,3	-4478,4	24,3	4473,5	4497,9	TD @ 12043' MD / 7834' TVD



Vertical Section at 170.67° (200 us/Vin)

Mewbourne Oil Co

Eddy County, New Mexico

Sec 8-22S-25E

True Grit 8 B3BO Fed Com #1H

Wellbore #1

Design: Wellbore #1

DDC Survey Report

28 May, 2014



DDC
Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well True Grit 8 B3B0 Fed Com #1H
Project:	Eddy County New Mexico	TVD Reference:	WELL @ 3614.0usft (Patterson #46)
Site:	Sec 8-22S-25E	MD Reference:	WELL @ 3614.0usft (Patterson #46)
Well:	True Grit 8 B3B0 Fed Com #1H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

Project: Eddy County, New Mexico			
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site:	Sec 8-22S-25E
Site Position:	Northing: 513,712.70 usft Latitude: 32° 24' 44.221 N
From: Map	Easting: 474,727.00 usft Longitude: 104° 24' 54.825 W
Position Uncertainty: 0.0 usft	Slot Radius: 13-3/16 " Grid Convergence: -0.04 °

Well:	True Grit 8 B3B0 Fed Com #1H
Well Position	+N/-S 0.0 usft Northing: 513,712.70 usft Latitude: 32° 24' 44.221 N
	+E/-W 0.0 usft Easting: 474,727.00 usft Longitude: 104° 24' 54.825 W
Position Uncertainty	0.0 usft Wellhead Elevation: usft Ground Level: 3,594.0 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	2/7/2014	7.66	60.15	48,370

Design:	Wellbore #1				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction	
	(usft)	(usft)	(usft)	(°)	
	0.0	0.0	0.0	179.67	

Survey/Program:		Date: 5/28/2014		
From (uoft)	To (uoft)	Survey (Wellbore)	Tool Name	Description
100.0	8,960.0	Gyro Survey (Wellbore #1)	Good_gyro	Good Gyro
7,065.0	12,043.0	MWD (Wellbore #1)	MWD default	MWD--Standard

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Bulld Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.58	64.89	100.0	0.2	0.5	-0.2	0.58	0.58	0.00
200.0	0.81	9.26	200.0	1.1	1.0	-1.1	0.68	0.23	-55.63
300.0	0.86	359.62	300.0	2.6	1.1	-2.6	0.15	0.05	-9.64
400.0	0.87	0.50	400.0	4.1	1.1	-4.1	0.02	0.01	0.88
500.0	0.79	38.02	500.0	5.4	1.6	-5.4	0.54	-0.08	37.52
600.0	1.29	62.31	599.9	6.5	3.0	-6.4	0.66	0.50	24.29
700.0	2.02	56.64	699.9	7.9	5.5	-7.9	0.75	0.73	-5.67
800.0	2.46	41.04	799.8	10.5	8.3	-10.5	0.75	0.44	-15.60
900.0	2.57	41.76	899.7	13.8	11.2	-13.8	0.11	0.11	0.72

DDC
Survey Report



Company:	Mawbourne Oil Co.	Local Co-ordinate Reference:	Well: True Grit 8 B3BO Fed Com #1H
Project:	Eddy County, New Mexico	IVD Reference:	WELL @ 3614.0usft (Patterson #46)
Site:	Sec 8-22S-26E	MD Reference:	WELL @ 3614.0usft (Patterson #46)
Well:	True Grit 8 B3BO Fed Com #1H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N-S (usft)	+E-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Built Rate (°/100usft)	Turn Rate (°/100usft)
1,000.0	3.00	38.11	999.6	17.6	14.4	-17.5	0.46	0.43	-3.65
1,100.0	4.02	31.47	1,099.4	22.6	17.8	-22.5	1.10	1.02	-6.64
1,200.0	4.64	19.60	1,199.1	29.4	21.0	-29.3	1.09	0.62	-11.87
1,300.0	4.62	23.46	1,298.8	36.9	23.9	-36.8	0.31	-0.02	3.86
1,400.0	4.28	30.42	1,398.5	43.8	27.4	-43.7	0.64	-0.34	6.96
1,500.0	3.96	36.20	1,498.3	49.8	31.4	-49.6	0.52	-0.32	5.78
1,600.0	3.89	35.04	1,598.0	55.4	35.4	-55.2	0.11	-0.07	-1.16
1,700.0	3.70	33.65	1,697.8	60.9	39.1	-60.6	0.21	-0.19	-1.39
1,800.0	3.36	34.86	1,797.6	65.9	42.6	-65.7	0.35	-0.34	1.21
1,900.0	3.18	37.49	1,897.4	70.5	45.9	-70.3	0.23	-0.18	2.63
2,000.0	2.95	37.95	1,997.3	74.8	49.2	-74.5	0.23	-0.23	0.46
2,100.0	2.76	35.62	2,097.2	78.8	52.2	-78.5	0.22	-0.19	-2.33
2,200.0	2.72	31.32	2,197.1	82.7	54.8	-82.4	0.21	-0.04	-4.30
2,300.0	2.56	29.68	2,297.0	86.7	57.1	-86.4	0.18	-0.16	-1.64
2,400.0	2.45	28.77	2,396.9	90.5	59.3	-90.2	0.12	-0.11	-0.91
2,500.0	2.22	26.08	2,496.8	94.1	61.2	-93.8	0.26	-0.23	-2.71
2,600.0	1.95	26.02	2,596.7	97.4	62.8	-97.0	0.27	-0.27	-0.04
2,700.0	1.73	27.80	2,696.7	100.3	64.2	-99.9	0.23	-0.22	1.78
2,800.0	1.55	29.67	2,796.6	102.8	65.6	-102.4	0.19	-0.18	1.87
2,900.0	1.53	31.02	2,896.6	105.1	66.9	-104.7	0.04	-0.02	1.35
3,000.0	1.46	19.09	2,996.6	107.5	68.0	-107.1	0.32	-0.07	-11.93
3,100.0	1.54	9.32	3,096.5	110.0	68.7	-109.6	0.27	0.08	-9.77
3,200.0	1.62	338.38	3,196.5	112.6	68.4	-112.2	0.85	0.08	-30.94
3,300.0	1.83	307.39	3,296.4	114.9	66.6	-114.5	0.94	0.21	-30.99
3,400.0	2.20	299.25	3,396.4	116.8	63.6	-116.4	0.47	0.37	-8.14
3,500.0	2.26	294.62	3,496.3	118.6	60.2	-118.2	0.19	0.06	-4.63
3,600.0	2.21	286.93	3,596.2	120.0	56.5	-119.6	0.30	-0.05	-7.09
3,700.0	2.15	284.37	3,696.2	121.0	52.9	-120.7	0.11	-0.06	-2.56
3,800.0	1.84	291.31	3,796.1	122.0	49.6	-121.7	0.39	-0.31	6.94
3,900.0	1.83	285.61	3,896.0	123.0	46.7	-122.7	0.27	-0.21	-5.70
4,000.0	1.26	277.58	3,996.0	123.5	44.2	-123.3	0.42	-0.37	-8.03
4,100.0	0.81	221.49	4,096.0	123.1	42.7	-122.9	1.05	-0.45	-56.09
4,200.0	0.59	178.95	4,196.0	122.1	42.2	-121.9	0.55	-0.22	-42.54
4,300.0	0.57	178.19	4,296.0	121.1	42.2	-120.8	0.02	-0.02	-0.76
4,400.0	0.65	233.38	4,396.0	120.3	41.8	-120.0	0.57	0.08	55.19
4,500.0	0.76	239.59	4,496.0	119.6	40.8	-119.3	0.13	0.11	6.21
4,600.0	0.75	254.04	4,596.0	119.1	39.6	-118.8	0.19	-0.01	14.45
4,700.0	0.79	284.97	4,696.0	119.1	38.3	-118.8	0.41	0.04	30.93
4,800.0	0.93	292.35	4,795.9	119.5	36.9	-119.3	0.18	0.14	7.38
4,900.0	1.12	293.06	4,895.9	120.2	35.2	-120.0	0.19	0.19	0.71
5,000.0	1.22	296.67	4,995.9	121.1	33.4	-120.9	0.12	0.10	3.61
5,100.0	1.30	291.62	5,095.9	122.0	31.4	-121.8	0.14	0.08	-5.05
5,200.0	1.50	295.35	5,195.9	123.0	29.1	-122.8	0.22	0.20	3.73

DDC Survey Report



Company:	Mewbourne Oil Co	Local/Co-ordinate Reference:	Well: True Grit 8 B3BO Fed Com #1H
Project:	Eddy County, New Mexico	TVD Reference:	WELL @ 3614.0usft (Patterson #46)
Site:	Sec 8-22S-25E	MD Reference:	WELL @ 3614.0usft (Patterson #46)
Well:	True Grit 8 B3BO Fed Com #1H	North Reference:	Grid:
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Depth:	Wellbore #1	Database:	EDM 5000.1 Single User Db

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	(N-S) (usft)	(E-W) (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,300.0	1.26	296.09	5,295.8	124.0	27.0	-123.9	0.24	-0.24	0.74
5,400.0	1.03	245.89	5,395.8	124.1	25.1	-124.0	0.99	-0.23	-50.20
5,500.0	0.87	225.64	5,495.8	123.2	23.8	-123.1	0.37	-0.16	-20.25
5,600.0	0.95	217.07	5,595.8	122.0	22.7	-121.9	0.16	0.08	-8.57
5,700.0	1.10	228.91	5,695.8	120.8	21.5	-120.6	0.26	0.15	11.84
5,800.0	1.00	231.68	5,795.8	119.6	20.1	-119.5	0.11	-0.10	2.77
5,900.0	0.45	215.19	5,895.7	118.7	19.2	-118.6	0.58	-0.55	-16.49
6,000.0	0.44	202.26	5,995.7	118.0	18.8	-117.9	0.10	-0.01	-12.93
6,100.0	0.22	219.78	6,095.7	117.5	18.6	-117.4	0.24	-0.22	17.52
6,200.0	0.40	331.34	6,195.7	117.7	18.3	-117.6	0.52	0.18	111.56
6,300.0	1.28	23.80	6,295.7	119.0	18.5	-118.9	1.08	0.88	52.46
6,400.0	1.59	30.45	6,395.7	121.2	19.7	-121.1	0.35	0.31	6.65
6,500.0	1.01	11.48	6,495.7	123.3	20.6	-123.2	0.71	-0.58	-18.97
6,600.0	1.93	12.28	6,595.6	125.8	21.1	-125.7	0.92	0.92	0.80
6,700.0	1.71	33.20	6,695.6	128.7	22.3	-128.6	0.70	-0.22	20.92
6,800.0	0.99	308.54	6,795.6	130.5	22.4	-130.4	1.89	-0.72	-84.66
6,900.0	2.74	354.43	6,895.5	133.4	21.5	-133.3	2.17	1.75	45.89
Tie In @ 6960 MD / 6956 TVD									
6,960.0	2.07	353.20	6,955.5	135.9	21.3	-135.8	1.12	-1.12	-2.05
7,065.0	3.50	267.90	7,060.4	137.7	17.8	-137.6	3.73	1.36	-81.24
7,097.0	7.90	246.90	7,092.2	136.8	14.8	-136.7	14.99	13.75	-65.63
7,129.0	11.00	247.90	7,123.8	134.8	10.0	-134.7	9.70	9.69	3.13
7,161.0	13.20	254.40	7,155.1	132.6	3.6	-132.6	8.08	6.88	20.31
7,193.0	16.50	254.00	7,186.0	130.4	-4.3	-130.4	10.32	10.31	-1.25
7,225.0	19.20	244.60	7,216.4	126.9	-13.4	-127.0	12.31	8.44	-29.38
7,257.0	22.40	237.40	7,246.4	121.3	-23.3	-121.5	12.78	10.00	-22.50
7,289.0	25.50	231.20	7,275.6	113.7	-33.8	-113.9	12.47	9.69	-19.38
7,320.0	28.70	228.60	7,303.2	104.4	-44.4	-104.7	12.33	10.32	-14.84
7,352.0	31.70	221.90	7,330.9	92.9	-55.6	-93.2	11.93	9.38	-14.69
7,384.0	34.90	217.90	7,357.6	79.4	-66.8	-79.8	12.12	10.00	-12.50
Crossed 330 Hardline @ 7411 MD / 7380 TVD									
7,411.4	37.63	214.18	7,379.7	66.3	-76.4	-66.7	12.80	9.97	-13.58
7,416.0	38.10	213.60	7,383.3	64.0	-77.9	-64.4	12.80	10.20	-12.59
7,448.0	41.10	209.00	7,408.0	46.5	-88.5	-47.0	13.10	9.38	-14.38
7,480.0	44.10	204.70	7,431.5	27.2	-98.3	-27.8	13.06	9.38	-13.44
7,512.0	46.70	200.30	7,454.0	6.2	-107.0	-6.8	12.72	8.13	-13.75
7,544.0	49.90	196.40	7,475.3	-16.5	-114.5	15.9	13.52	10.00	-12.19
7,576.0	52.70	192.10	7,495.3	-40.7	-120.6	40.0	13.65	8.75	-13.44
7,607.0	56.10	189.50	7,513.4	-65.5	-125.3	64.7	12.91	10.97	-8.39
7,639.0	58.20	185.00	7,530.7	-92.1	-128.7	91.4	13.51	6.56	-14.06
7,671.0	60.70	180.10	7,547.0	-119.6	-129.9	118.9	15.32	7.81	-15.31
7,702.0	64.20	177.90	7,561.3	-147.1	-129.4	146.4	12.92	11.29	-7.10
7,734.0	67.20	177.50	7,574.5	-176.2	-128.2	175.5	9.44	9.38	-1.25
7,766.0	70.40	177.90	7,588.1	-206.1	-127.0	205.3	10.07	10.00	1.25

DDC
Survey Report



Company:	Mewbourne Oil Co.	Local Co-ordinate Reference:	Well: True Grit 8 B3BO Fed Com #1H
Project:	Eddy County, New Mexico	TVD Reference:	WELL @ 3614.0usft (Patterson #46)
Site:	Sec 8-22S-25E	MD Reference:	WELL @ 3614.0usft (Patterson #46)
Well:	True Grit 8 B3BO Fed Com #1H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey/Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	N-S (usft)	E-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
7,798.0	73.60	178.20	7,596.0	-236.5	-126.0	235.7	10.04	10.00	0.94
7,829.0	76.10	178.30	7,604.1	-266.4	-125.1	265.6	8.07	8.06	0.32
7,861.0	79.60	177.70	7,610.8	-297.6	-124.0	296.9	11.09	10.94	-1.88
7,893.0	82.70	176.30	7,615.7	-329.2	-122.3	328.5	10.61	9.69	-4.38
7,925.0	85.80	177.00	7,618.9	-361.0	-120.5	360.3	9.93	9.69	2.19
7,938.0	86.50	177.40	7,619.8	-373.9	-119.8	373.2	6.20	5.38	3.08
8,019.0	87.10	177.00	7,624.3	-454.7	-115.9	454.0	0.89	0.74	-0.49
8,083.0	86.20	177.30	7,628.1	-518.5	-112.7	517.9	1.48	-1.41	0.47
8,146.0	88.60	177.80	7,630.9	-581.4	-110.0	580.8	3.89	3.81	0.79
8,209.0	89.70	177.80	7,631.9	-644.3	-107.6	643.7	1.75	1.75	0.00
8,273.0	89.70	178.00	7,632.2	-708.3	-105.3	707.7	0.31	0.00	0.31
8,336.0	90.10	177.50	7,632.3	-771.3	-102.8	770.6	1.02	0.63	-0.79
8,399.0	90.00	177.50	7,632.2	-834.2	-100.0	833.6	0.16	-0.16	0.00
8,462.0	90.70	177.70	7,631.9	-897.1	-97.4	896.6	1.16	1.11	0.32
8,526.0	90.50	178.40	7,631.2	-961.1	-95.2	960.5	1.14	-0.31	1.09
8,589.0	89.50	178.50	7,631.2	-1,024.1	-93.5	1,023.5	1.60	-1.59	0.16
8,652.0	90.20	178.70	7,631.4	-1,087.1	-92.0	1,086.5	1.16	1.11	0.32
8,715.0	90.50	179.10	7,631.0	-1,150.0	-90.8	1,149.5	0.79	0.48	0.63
8,779.0	89.80	179.20	7,630.8	-1,214.0	-89.8	1,213.5	1.10	-1.09	0.16
8,842.0	90.20	177.50	7,630.8	-1,277.0	-88.0	1,276.5	2.77	0.63	-2.70
8,905.0	90.40	176.80	7,630.5	-1,339.9	-84.9	1,339.4	1.16	0.32	-1.11
8,969.0	89.60	176.40	7,630.5	-1,403.8	-81.1	1,403.3	1.40	-1.25	-0.63
9,032.0	90.10	177.00	7,630.6	-1,466.7	-77.4	1,466.2	1.24	0.79	0.95
9,094.0	90.40	177.50	7,630.4	-1,528.6	-74.5	1,528.2	0.94	0.48	0.81
9,159.0	89.60	177.80	7,630.4	-1,593.6	-71.8	1,593.1	1.31	-1.23	0.46
9,222.0	90.40	177.70	7,630.4	-1,656.5	-69.3	1,656.1	1.28	1.27	-0.16
9,286.0	90.70	177.70	7,629.8	-1,719.5	-66.8	1,719.1	0.48	0.48	0.00
9,349.0	90.00	177.30	7,629.4	-1,783.4	-64.0	1,783.0	1.26	-1.09	-0.63
9,412.0	89.40	177.30	7,629.7	-1,846.3	-61.0	1,846.0	0.95	-0.95	0.00
9,475.0	90.30	176.80	7,629.9	-1,909.3	-57.8	1,908.9	1.63	1.43	-0.79
9,539.0	91.20	177.10	7,629.0	-1,973.2	-54.4	1,972.8	1.48	1.41	0.47
9,602.0	90.70	177.70	7,628.0	-2,036.1	-51.5	2,035.8	1.24	-0.79	0.95
9,666.0	90.00	176.60	7,627.6	-2,100.0	-48.4	2,099.7	2.04	-1.09	-1.72
9,729.0	89.70	177.00	7,627.8	-2,162.9	-44.8	2,162.6	0.79	-0.48	0.63
9,792.0	88.80	176.80	7,628.6	-2,225.8	-41.4	2,225.5	1.46	-1.43	-0.32
9,856.0	89.60	176.60	7,629.5	-2,289.7	-37.8	2,289.4	1.29	1.25	-0.31
9,919.0	90.30	176.80	7,629.5	-2,352.6	-34.1	2,352.4	1.16	1.11	0.32
9,983.0	89.30	176.60	7,629.8	-2,416.5	-30.4	2,416.3	1.59	-1.56	-0.31
10,046.0	89.60	177.10	7,630.4	-2,479.4	-27.0	2,479.2	0.93	0.48	0.79
10,109.0	90.70	178.70	7,630.2	-2,542.3	-24.7	2,542.2	3.08	1.75	2.54
10,172.0	90.00	178.90	7,629.8	-2,605.3	-23.4	2,605.1	1.16	-1.11	0.32
10,236.0	89.60	179.40	7,630.0	-2,669.3	-22.4	2,669.1	1.00	-0.63	0.78
10,299.0	90.20	179.20	7,630.1	-2,732.3	-21.6	2,732.1	1.00	0.95	-0.32

DDC Survey Report



Company:	Newbourne Oil Co	Local Co-ordinate Reference:	Well: True Grit 8 B3BO Fed Com #1H
Project:	Eddy County New Mexico	TVD Reference:	WELL @ 3614.0usft (Patterson #46)
Site:	Sec 8-22S-25E	MD Reference:	WELL @ 3614.0usft (Patterson #46)
Well:	True Grit 8 B3BO Fed Com #1H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
10,363.0	91.00	178.70	7,629.5	-2,796.3	-20.5	2,796.1	1.47	1.25	-0.78
10,426.0	90.30	178.20	7,628.8	-2,859.3	-18.8	2,859.1	1.37	-1.11	-0.79
10,490.0	89.40	177.70	7,628.9	-2,923.2	-16.5	2,923.1	1.61	-1.41	-0.78
10,553.0	90.00	177.70	7,629.3	-2,986.2	-13.9	2,986.0	0.95	0.95	0.00
10,617.0	90.70	178.40	7,628.9	-3,050.1	-11.8	3,050.0	1.55	1.09	1.09
10,680.0	90.10	178.40	7,628.4	-3,113.1	-10.0	3,113.0	0.95	-0.95	0.00
10,743.0	89.40	178.40	7,628.7	-3,176.1	-8.2	3,176.0	1.11	-1.11	0.00
10,807.0	90.60	178.50	7,628.7	-3,240.1	-6.5	3,240.0	1.88	1.88	0.16
10,870.0	91.30	178.50	7,627.7	-3,303.0	-4.9	3,302.9	1.11	1.11	0.00
10,934.0	90.40	177.70	7,626.7	-3,367.0	-2.7	3,366.9	1.88	-1.41	-1.25
10,997.0	90.30	178.40	7,626.3	-3,429.9	-0.6	3,429.9	1.12	-0.16	1.11
11,060.0	89.50	177.70	7,626.4	-3,492.9	1.5	3,492.9	1.69	-1.27	-1.11
11,123.0	88.90	177.10	7,627.3	-3,555.8	4.4	3,555.8	1.35	-0.95	-0.95
11,186.0	89.20	177.50	7,628.4	-3,618.8	7.4	3,618.7	0.79	0.48	0.63
11,249.0	91.00	178.70	7,628.2	-3,681.7	9.5	3,681.7	3.43	2.86	1.90
11,312.0	90.70	179.60	7,627.3	-3,744.7	10.4	3,744.7	1.51	-0.48	1.43
11,375.0	90.30	179.90	7,626.8	-3,807.7	10.7	3,807.7	0.79	-0.63	0.48
11,439.0	89.50	179.80	7,626.9	-3,871.7	10.8	3,871.7	1.26	-1.25	-0.16
11,502.0	89.30	179.40	7,627.5	-3,934.7	11.3	3,934.7	0.71	-0.32	-0.63
11,566.0	88.60	179.60	7,628.7	-3,998.7	11.8	3,998.7	1.14	-1.09	0.31
11,628.0	89.50	179.80	7,629.7	-4,060.7	12.2	4,060.7	1.49	1.45	0.32
11,691.0	90.10	179.80	7,629.9	-4,123.7	12.4	4,123.7	0.95	0.95	0.00
11,755.0	89.30	179.20	7,630.3	-4,187.7	12.9	4,187.7	1.56	-1.25	-0.94
11,817.0	88.80	177.80	7,631.3	-4,249.6	14.6	4,249.6	2.40	-0.81	-2.26
11,881.0	88.40	177.30	7,632.9	-4,313.6	17.3	4,313.6	1.00	-0.63	-0.78
11,944.0	89.30	177.70	7,634.1	-4,376.5	20.0	4,376.5	1.56	1.43	0.63
11,989.0	90.10	177.50	7,634.4	-4,421.4	21.9	4,421.5	1.83	1.78	-0.44
TD @ 12043' MD / 7634' TVD									
12,043.0	90.10	177.50	7,634.3	-4,475.4	24.3	4,475.5	0.00	0.00	0.00

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
6,960.0	6,955.5	135.9	21.3	Tie In @ 6960' MD / 6956' TVD
7,411.4	7,379.7	66.3	-76.4	Crossed 330' Hardline @ 7411' MD / 7380' TVD
12,043.0	7,634.3	-4,475.4	24.3	TD @ 12043' MD / 7634' TVD

Checked By: _____ Approved By: _____ Date: _____